

Claims

1. A method for operating a radio communication system comprising a radio access point (AP) and a plurality of radio stations (MN1, MN2, MN3, MN4, MN5, MN6), wherein the radio access point (AP) is located outside of the direct radio transmission range of a first radio station (MN1), and wherein the radio access point (AP) requires information about a path comprising one or more further radio stations (MN3, MN5, MN6) which can be used for a message transfer between the radio access point (AP) and the first radio station (MN1), characterized in that the first radio station (MN1) learns about the requirement for the information after the radio access point (AP), and that the first radio station (MN1) then initiates a method for determining a path between the first radio station (MN1) and the radio access point (AP).
2. The method as claimed in claim 1, characterized in that a base station (BS) is present which is located within the radio coverage area of the radio access point (AP) and the first radio station (MN1) is located within its radio coverage area, and that the radio access point (AP) notifies the base station (BS) about the requirement for the information about a path, and that the first radio station (MN1) learns about the requirement for the information as a result of a notification (ERR2) by the base station (BS).

3. The method as claimed in claim 1 or 2,
characterized in that a path comprising one or more further radio stations (MN3, MN5, MN6) between the first radio station (MN1) and the radio access point (AP) is known to the first radio station (MN1) and the radio access point (AP), with the result that information can be transferred from the first radio station (MN1) to the radio access point (AP) and from the radio access point (AP) to the first radio station (MN1) via the path, and
that the radio access point (AP) receives information about the failure of the known path from a radio station (MN3) of the path,
that the first radio station (MN1) learns about the failure of the known path after the radio access point (AP), and
that the first radio station (MN1) then initiates a method for determining a new path between the first radio station (MN1) and the radio access point (AP).
4. The method as claimed in claim 3, characterized in that
the radio access point (AP) receives the information about the failure of the known path as a result of its own sending of information (DATA) for the first radio station (MN1).
5. The method as claimed in one of the claims 3 or 4, characterized in that
the first radio station (MN1) sends information (TEST) for the radio access point (AP) for the purpose of determining the presence of a failure of the known path.

6. The method as claimed in claim 5, characterized in that the sending of the information (TEST) for the purpose of determining the presence of a failure takes place at regular time intervals.
7. The method as claimed in one of the claims 5 or 6, characterized in that the first radio station (MN1) learns about the failure of the known path as a result of the sending of the information (TEST) for the purpose of determining the presence of a failure.
8. The method as claimed in one of the claims 5 to 7, characterized in that the first radio station (MN1) sends the information (TEST) for the purpose of determining the presence of a failure as a result of at least one notification sent in the course of a preceding determination of the known path.
9. A radio station (MN1) for a radio communication system comprising a radio access point (AP) and further radio stations (MN2, MN3, MN4, MN5, MN6), characterized by means for receiving a notification that the radio access point (AP) requires information about a path comprising one or more further radio stations (MN3, MN5, MN6) which can be used for a message transfer between the radio access point (AP) and the radio station (MN1), and means (M4) for initiating a method for determining a path between the radio station (MN1) and the radio access point (AP) following the reception of the notification.

10. A radio station (MN1) for a radio communication system comprising a radio access point (AP) and further radio stations (MN2, MN3, MN4, MN5, MN6),
having means (M1) for storing a path between the radio station (MN1) and the radio access point (AP) comprising one or more of the further radio stations (MN3, MN5, MN6), with the result that information can be transferred from the radio station (MN1) to the radio access point (AP) and from the radio access point (AP) to the radio station (MN1) via the path,
having means (M2) for sending information for the radio access point (AP) for the purpose of determining the presence of a failure of the stored path, and
having means (M3) for receiving and processing information about the presence of a failure of the stored path, and
having means (M4) for initiating a method for the purpose of determining a new path between the radio station (MN1) and the radio access point (AP) following the reception of information about the presence of a failure of the stored path.
11. A computer program product for a radio station (MN1), in particular as claimed in claim 10,
for controlling at least one sending of information for a radio access point (AP) for the purpose of determining the presence of a failure of a path between the radio station (MN1) and the radio access point (AP).